

US EPA ARCHIVE DOCUMENT

20

Date Out EFB: DEC 21 1979

To: Product Manager 25  
TS-767

Through: Dr. Gunter Zweig, Chief  
Environmental Fate Branch

From: Review Section No. 1  
Environmental Fate Branch

Attached please find the environmental fate review of:

Reg./File No.: 524-GGE, PP8F2122, 9H5196

Chemical Sodium sesqui salt of glyphosate

Type Product: Plant growth regulant

Product Name: Polado<sup>TM</sup>

Company Name: Monsanto

Submission Purpose: Registration of new product by incremental  
risk assessment

ZBB Code: Sec 3

Date in: 9-4-79

Date Completed: 12-20-79

Deferrals To:

\_\_\_\_\_ Ecological Effects Branch

\_\_\_\_\_ Residue Chemistry Branch

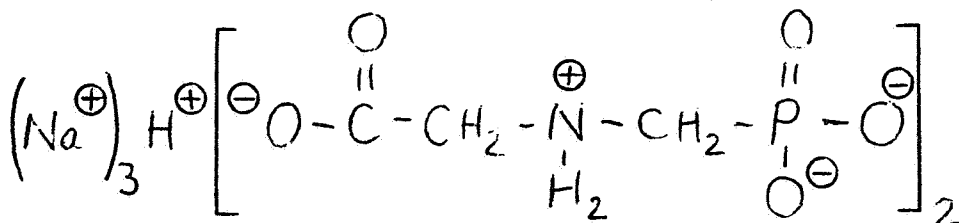
\_\_\_\_\_ Toxicology Branch

306

30

1. INTRODUCTION

- 1.1 This submission for the registration of the sodium sesqui salt of glyphosate as a plant growth regulator on sugarcane is being handled as a new formulation of glyphosate. Therefore, as requested by the PM (Taylor) in his undated memo to G. Zeig thru J.W. Akerman, an incremental risk assessment will be made.
- 1.2 Glyphosate isopropylamine salt is currently registered for use on fields to be planted to sugarcane as a herbicide, as a spot treatment in or around sugarcane fields and as a treatment to remove last stubble or ratoon cane (EPA Reg. No. 524-308).
- 1.3 The sodium sesqui salt of glyphosate, known as MON-8000, dissociates immediately in water to glyphosate. See report of telephone call dated Dec. 19, 1979 on 524-GGE recorded by S.M. Creeger in the glyphosate file.
- 1.4 See previous sugarcane evaluation of 524-308, PP6F1758, dated June 30, 1978 and the review of data under 524-308 dated July 28, 1978.
- 1.5 Structure



2. DIRECTIONS FOR USE

- 2.1 For use on sugarcane only, foliar applied.
- 2.2 HAWAII - Apply 0.375-0.90 lb ai/A 4-10 weeks before harvest. Apply by air in 5-10 gallons of water.

22

FLORIDA, LOUISIANA and TEXAS - Apply 0.225-0.525 lb ai/A 3-6 weeks before harvest of last ratoon only. Apply by air in 5-10 gallons of water.

2.3 Rainfall within 6 hours after application may reduce effectiveness.

Do not add additional surfactant. The formulation contains sufficient surfactant. Mix only with clear water containing no soil.

Do not apply to sugarcane to be harvested for seed purposes.

Avoid applying under conditions which will allow drift. Apply uniformly avoiding uneven or overlapped application.

2.4 Do not rotate crops other than corn (all), soybeans, small grains, forage grasses, beans (edible), cotton or sorghum for one year following application.

### 3. DISCUSSION OF DATA

3.1 New environmental fate data was not submitted. However, previously reviewed data was referenced.

### 4. CONCLUSIONS

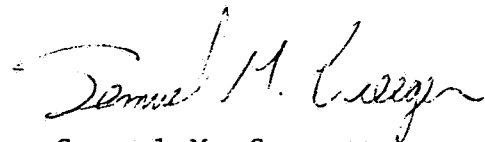
4.1 The sodium sesqui salt of glyphosate immediately dissociates in water to glyphosate. Glyphosate is currently registered for use on sugarcane fields (EPA Reg. No. 524-308) at a maximum rate of 7.95 lb ai/A/season. Also, the fate of glyphosate in the environment when applied as the sodium sesqui salt is not altered. Therefore, the proposed use of the sodium sesqui salt of glyphosate at maximum rates of 0.9 lb ai/A/season on sugarcane will not result in an increased burden to the environment.

4.2 Not forage grasses but forage grasses grown for seed are registered on the 524-308 label. Therefore, the "forage grasses" rotation on the proposed label must be changed to "forage grasses grown for seed only."

308

5. RECOMMENDATIONS

- 5.1 The sodium sesqui salt of glyphosate is considered a new formulation of glyphosate and its use on sugarcane as proposed will not result in an increased burden to the environment or alter the environmental fate of glyphosate.
- 5.2 Not forage grasses but forage grasses grown for seed are registered on the 524-308 label. Therefore, the "forage grasses" rotation on the proposed label must be changed to "forage grasses grown for seed only."



Samuel M. Creeger  
December 20, 1979  
Section #1  
Environmental Fate Branch  
Hazard Evaluation Division